

**IN THE CLAIMS:**

Please amend claims as follows.

1. (currently amended) A method for the detection of leaks in a heat exchanger having discrete flow paths for working fluid and heat exchange fluid, respectively, the method comprising introduction of a detection fluid within one of said flow paths, passing the detection fluid in different directions in said one flow path, and detecting any detection fluid which has leaked from said one flow path to said other flow path, in which the detection fluid comprises a fluorescent dye and the detection fluid is detected using a fluorescent-responsive detection means, and the heat exchanger is a plate pack heat exchanger, in which the heat exchanger is disassembled following the dye distribution step, whereby the inspecting step is carried out on individual plates.

2. (original) A method according to claim 1, in which a detection fluid is introduced in one flow path and air is allowed to flow through the other flow path.

3. (previously presented) A method according to claim 1, in which the one flow path in which the detection fluid is introduced is the heat exchange fluid path, the detection of leaked detection fluid taking place in the working fluid flow path.

4. (previously presented) A method according to claim 1, in which the detection fluid is a gas comprising helium and the pressure in one flow path is higher than the other flow path.

5. (original) A method according to claim 4, in which the gas comprising helium is a mixture of helium and air in a concentration of 96-98% helium.

6. (previously presented) A method according to claim 4, including the step of introducing a fluorescent dye into one of said flow paths and allowing the dye to become distributed throughout said flow path and, thereafter, inspecting the heat exchanger from the other side from that which defines said flow path with fluorescent-responsive detection means to identify the source of a leak.

7-8. canceled

9. (previously presented) A method for the detection of leaks in a heat exchanger having discrete flow paths for working fluid and heat exchange fluid, respectively, the method comprising introduction of a detection fluid within one of said flow paths, passing the detection fluid in different directions in said one flow path, and detecting any detection fluid which has leaked from said one flow path to said other flow path, including the step of introducing a fluorescent dye into one of said flow paths and allowing the dye to become distributed throughout said flow path and, thereafter, inspecting the heat exchanger from the other side from that which defines said flow path with fluorescent-responsive detection means to identify the source of a leak, the heat exchanger being a plate pack heat exchanger, in which the heat exchanger is disassembled following the dye distribution step, whereby the inspecting step is carried out on individual plates.

10. (previously presented) A method according to claim 2, in which the one flow path in which the detection fluid is introduced is the heat exchange fluid path, the detection of leaked detection fluid taking place in the working fluid flow path.

11. (previously presented) A method according to claim 2, in which the detection fluid is a gas comprising helium and the pressure in one flow path is higher than the other flow path.

12. (previously presented) A method according to claim 3, in which the detection fluid is a gas comprising helium and the pressure in one flow path is higher than the other flow path.

13. (previously presented) A method according to claim 5, including the step of introducing a fluorescent dye into one of said flow paths and allowing the dye to become distributed throughout said flow path and, thereafter, inspecting the heat exchanger from the other side from that which defines said flow path with fluorescent-responsive detection means to identify the source of a leak.

14. (previously presented) A method according to claim 2, in which the detection fluid comprises a fluorescent dye.

15. (previously presented) A method according to claim 3, in which the detection fluid comprises a fluorescent dye.

16. (previously presented) A method for the detection of leaks in a heat exchanger having discrete flow paths for working fluid and heat exchange fluid, respectively, the method comprising introduction of a

detection fluid within one of said flow paths, passing the detection fluid in different directions in said one flow path, and detecting any detection fluid which has leaked from said one flow path to said other flow path, wherein the detection fluid is a fluorescent dye and the heat exchanger being a plate pack heat exchanger, in which the heat exchanger is disassembled following the dye distribution step, whereby the inspecting step is carried out on individual plates.

17. canceled

18. (previously presented) A method according to claim 16, in which the fluorescent dye is detected using a fluorescent-responsive detection means.